APPLICATION FOR UNITED STATES LETTERS PATENT

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TITLE:

METHOD OF ADVERTISING AND CONDUCTING ELECTRONIC COMMERCIAL TRANSACTIONS THROUGH A COMMUNICATION

NETWORK

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METHOD OF ADVERTISING AND CONDUCTING ELECTRONIC COMMERCIAL TRANSACTIONS THROUGH A COMMUNICATION NETWORK

BACKGROUND OF THE INVENTION

1. Field of the Invention

[1] The present invention relates to a method of advertising and conducting electronic commercial transactions and, more particularly, to a method of discounting a multimedia item.

2. Background of the Related Art

- [2] Fig. 1 is an illustrative whole-network system capable of providing a general electronic commercial transaction service. The network system of Fig. 1 comprises a content sale server (CSS) 30 providing for sale various video and audio contents through a communication network; a plurality of personal communication terminals (PCTs) 10₁ to 10_n, such as personal computers (PCs); a plurality of on-line sale servers 20₁ to 20_m; and Internet 100 providing data communication paths among the network elements. An electronic commercial transaction conducted in the network system of Fig. 1 is described below.
- [3] A buyer who wants to buy a digital audio or video content item through an on-line content selling service, provided by CSS 30, becomes a member of CSS 30 using his or her PCT 10₁. After subscribing, he or she is authenticated through his or her username and password, allocated during the previous subscription step, and then selects one or more multi-media content items to buy. The selected items are downloaded from CSS 30 to PCT 10₁, through

Internet 100, or delivered to the buyer through a transportation means. The charge for the selected items is paid through conventional ways, such as a credit card system or a cable transfer between bank accounts.

- [4] CSS 30 can show a buyer various advertising materials furnished by many goods sellers, while it is selling various multi-media content items through Internet 100. The advertising materials can be presented on PCT 10_n in various forms, like a banner, etc. Through this presentation, various goods are advertised to consumers.
- [5] Thus, a company or a businessman operating CSS 30 can make profits through advertisements, provided by the advertisers operating sale servers 20_1 to 20_m , as well as through the sale of on-line goods over the Internet.
- [6] The number of servers conducting advertisements and electronic commercial transactions has increased remarkably, these days. Thus, more effective and distinctive methods for selling goods and content are required. Moreover, it is difficult to verify the effectiveness of advertising with a display banner on a buyer's terminal. As a result, advertisers do not regard the aforementioned advertising method as effective any more.
- [7] The above references are incorporated by reference herein where appropriate for appropriate teachings of additional or alternative details, features and/or technical background.

SUMMARY OF THE INVENTION

[8] An object of the invention is to solve at least the above problems and/or disadvantages and to provide at least the advantages described hereinafter.

- [9] It is another object of the present invention to provide a method of advertising and conducting electronic commercial transactions that is capable of discounting audio and video or other media contents to be sold on-line, in connection with advertisements (ads).
- [10] It is a further object of the invention to guarantee the effectiveness of ads used in connection with the on-line sale.
- [11] In order to achieve at least the above objects, in whole or in part, there is provided a method of advertising and conducting electronic commercial transactions through a communication network, including selecting a first content to buy through the communication network, selecting at least one second content having an effect of information conveyance, combining the first content and the second content into a third content, and determining the price of the third content based on the first and the second content.
- [12] In order to achieve at least the above objects, in whole or in part, there is provided another method of advertising and conducting electronic commercial transactions through a communication network, including selecting an ad item, presenting the selected ad item, asking a question about the content of the presented ad item, receiving a reply to the question, and determining whether a user has viewed the presented ad item based on the information contained in the reply.
- [13] In order to achieve at least the above objects, in whole or in part, there is provided another method of advertising and conducting electronic commercial transactions through a communication network, including selecting a multi-media content to buy through the communication network, selecting at least one ad content, presenting the selected ad content and

asking a question about the presented ad content, receiving a reply to the question and determining whether a user has viewed the presented ad content based on the information contained in the reply, combining the multi-media content and the ad content, and determining the price of the combined content based on the price of the multi-media content and the number of ads.

[14] Additional advantages, objects, and features of the invention will be set forth in part in the description which follows and in part will become apparent to those having ordinary skill in the art upon examination of the following or may be learned from practice of the invention. The objects and advantages of the invention may be realized and attained as particularly pointed out in the appended claims.

BRIEF DESCRIPTION OF THE DRAWINGS

- [15] The invention will be described in detail with reference to the following drawings in which like reference numerals refer to like elements wherein:
- [16] Fig. 1 illustrates a whole network system capable of providing a general electronic commercial transaction service;
- [17] Fig. 2 illustrates a flow chart of a method of advertising and conducting electronic commercial transactions through a communication network, according to a preferred embodiment of the present invention;
- [18] Figs. 3 and 4 illustrate examples of a menu screen presented on a personal communication terminal, in accordance with the preferred embodiment of the present invention;

- [19] Fig. 5 illustrates a format of combined contents from multi-media data and ad data;
 - [20] Fig. 6 illustrates combining the multi-media content and ad content; and
- [21] Fig. 7 illustrates a flow chart of a method of advertising and conducting electronic commercial transactions through a communication network, according to another embodiment of the present invention.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

- [22] Fig. 2 is a flow chart of a method of advertising and conducting electronic commercial transactions according to a preferred embodiment of the present invention. The method of Fig. 2 is preferably conducted in the network system of Fig. 1, where CSS 30 has the necessary functions for conducting the method according to the present invention. The method is described below in greater detail, with reference to Fig. 2. Although the method described below relates to the purchase of a digital audio or video content item, it should be understood that the methods described herein can be applied to any on-line purchase transaction.
- [23] A buyer who wants to buy digital audio or video content items through an on-line content sale service, provided by CSS 30, becomes a member of CSS 30 using his or her PCT 10₁. After subscription, he or she is authenticated through his or her username and password, which was allocated during the previous subscription step. If the authentication is successful, the subscriber can buy various multi-media contents on-line from CSS 30. To accomplish an on-line transaction, CSS 30 sends a menu screen 300, illustrated by the example of Fig. 3. Menu screen

300 is used for selecting multi-media contents 301 to buy and for displaying a possible discount of a selected content or contents 301 to PCT 10₁ of the subscriber (S10). Then, the sent menu screen 300 is displayed on a displaying unit of PCT 10₁, in which a viewing program (e.g., a web browser capable of interpreting data received from CSS 30) is embedded.

- [24] The menu screen 300 sent to PCT 10₁ also contains discount buttons 302 for each content item 301 to be sold. Accordingly, if the subscriber wants to buy a multi-media content item 301 or items more cheaply, he or she clicks the discount button 302 below a desired content item 301.
- [25] If the subscriber clicks the discount button 302 to buy a corresponding multimedia content item 301 at a discount (S11), CSS 30 recognizes that the multi-media content item 301 above the clicked button 302 is selected for purchase by the subscriber and, then, conducts a procedure for choosing an ad or ads to be added to the selected content item (S12). In the ad choosing procedure, one or more ads pre-assigned to the content item are chosen by CSS 30, or are freely chosen by the subscriber from an ad list, provided by CSS 30. In addition, each ad item may include a list of other goods and address information (e.g., URL (Uniform Resource Locator) information of other on-line sale servers).
- [26] After selecting ads to be added, CSS 30 calculates how much the selected multimedia content item 301 must be discounted based on the number of chosen ads, the repeated selection of the same ad, and the value of each chosen ad. Thereafter, CSS 30 shows the calculated discount to the subscriber (S13).

[27] Fig. 4 illustrates how a selected content item 301 is discounted. Suppose the price of a selected content item 301 is \$13.99 and the value of an ad 401 chosen by the subscriber, or pre-assigned to the selected content item 301, is \$0.14. Thus, the calculated sale price of the selected content item 301 becomes \$13.85 (i.e., \$13.99-\$0.14) and it is shown to the subscriber. If the subscriber is not satisfied with the discount and willingly suffers future inconvenience by viewing at least one additional ad, he or she holds up the purchase request (S14) and selects more ads 402 to be added to the selected multi-media content item 301. Then, CSS 30 recalculates the discount in accordance with the additional ad or ads and shows it to the subscriber, in the aforementioned manner.

[28] However, each value of the additional ad or ads 402 is not wholly given to the subscriber at this time. Instead, each value is reduced in proportion to the number of additional ads. For example, if an ad having a value of \$0.14 is chosen second, the value \$0.14 is reduced by 10% because it is chosen second. Therefore, the discount attributed to the second ad becomes \$0.126. Similarly, the reduction rate for the third ad is increased to 20%. In other words, the more ads the subscriber selects to add, the more the reduction rate is increased. For instance, if three ads worth \$0.14 each are chosen, the total discount becomes \$0.378 (i.e., \$0.14+\$0.126+\$0.112).

[29] In addition, if the same ad is chosen repeatedly, the increment of the reduction rate may be enlarged to 20% or more, to reduce the discount advantage given to one subscriber, who repeatedly selects the same ad. This greater reduction is intended to protect the advertiser,

since the ad's effectiveness is increased only slightly, when selected repeatedly by the same subscriber.

- [30] If the subscriber thinks the number of selected ads and the discount are reasonable, he or she clicks a purchase button on the displayed menu screen. Then, CSS 30 recomposes the selected multi-media content 301 to add the chosen ad contents 401, 402 thereto (S15). The re-composed multi-media content with the chosen ad contents 401, 402 is then sold to the subscriber with the discount, calculated as above. The next step of the selling process, including settlement request and acknowledgment, is accomplished through conventional methods via a network (S16). Thereafter, the purchased content is downloaded or delivered to the subscriber's residence. The contents may be saved in a recording medium, such as a CD, a DVD, an FDD, an HDD, or a memory.
- [31] The multi-media content 301 to be sold may be re-composed in such a manner that an ad content 401, 402 is added anywhere, such as in front, the middle, or behind the multi-media content, as shown in Fig. 5. When re-composing the multi-media content 301 with the ad content or contents 401, 402, the multi-media content and ad content are individually decoded first (101 and 102), as shown in Fig. 6. Then, the individual decoded data of the multi-media and ad content are combined, while being encoded again (103) in the format of the multi-media 301 content to be sold. Finally, the re-encoded multi-media content 301, including the chosen ad content or contents 401, 402, are downloaded or delivered to the subscriber.
- [32] Instead of mixing ad contents 401, 402 with a multi-media content 301 to be sold, the ad contents 401, 402 may be inserted in a predetermined field, specified in the format of the

multi-media content 301, without any format conversion. For example, if the multi-media content 301 to be sold is 'mp3' audio data and the ad content 401, 402 is composed of text data, the text of the ad content 401, 402 is simply inserted behind the 'TAG' field. The text data of the ad content 401, 402 inserted behind the 'TAG' field will be displayed in a liquid crystal display (LCD) window, equipped in an 'mp3' player.

- [33] The discount advantage acquired from the addition of the ad contents 401, 402 to the multi-media content 301 may be reserved for cash back or later use as a purchase discount for another multi-media content item 301.
- [34] To enhance the effect of advertisement and discount, CSS 30 can withhold the price reduction until after it verifies that the subscriber has actually viewed or considered the contents of selected ads 401, 402 at least once, as shown in Fig. 7. The method depicted in Fig. 7 may be conducted separately from, or together with, the above-mentioned method of Fig. 2. The method of Fig. 7 is explained below in greater detail.
- [35] CSS 30 decodes data of an ad item, chosen by a subscriber, so that it may present the decoded contents to the subscriber before discounting the price of the corresponding multimedia content item 301 (S20). Then, CSS 30 sends an electronic questionnaire to the subscriber's PCT 10₁ (S21). This electronic questionnaire may contain questions about the good's name or the ad company related to the selected ad item 401, 402. The contents of the electronic questionnaire are displayed on PCT 10₁, using an appropriate embedded protocol interpreter.

- [36] After the electronic questionnaire is sent, replies are made by the subscriber (S22). Then, CSS 30 examines whether the replies are correct or not. If correct (S23), CSS 30 concludes that the subscriber has actually viewed or considered the content of the selected ad item (S24). If CSS 30 receives an incorrect reply or no reply, then step S21 is repeated.
- [37] While verifying the reply for each selected ad item, as above, CSS 30 counts the number of ad items the subscriber has actually viewed and gives the subscriber rewarding points corresponding to each value of the counted ad items (S25). The rewarding points can be used for price reduction, mileage, electronic coupon, goods purchase, etc.
- [38] Therefore, the rewarding points are accumulated for each subscriber, identified by his or her username entered at the previous login step. The rewarding points can also be used for the above-explained multi-media content purchasing procedure. Namely, if a subscriber assigns some points from his or her total accumulated rewarding points, the price of selected multi-media content items 301 is discounted by an amount of money corresponding to the assigned points.
- [39] The method of advertising and conducting electronic commercial transactions through a communication network, in accordance with the present invention, can induce increased sales of multi-media contents using discounts in connection with ads. Additionally, the invention helps guarantee the effectiveness of ads by reproducing an ad or ads together with a multi-media content, whenever the multi-media content is played back. As a result, more advertisers can be won over so that profits through ad sales can be increased.

[40] The foregoing embodiments and advantages are merely exemplary and are not to be construed as limiting the present invention. The present teaching can be readily applied to other types of apparatuses. The description of the present invention is intended to be illustrative, and not to limit the scope of the claims. Many alternatives, modifications, and variations will be apparent to those skilled in the art. In the claims, means-plus-function clauses are intended to cover the structures described herein as performing the recited function and not only structural equivalents but also equivalent structures.